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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/050,808	03/30/98	MACHIDA	MAT-5860

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EXAMINER

WONG, A

ART UNIT	PAPER NUMBER
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2713

DATE MAILED:

07/18/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/050,808

Applicant(s)

MACHIDA, YUTAKA

Examiner

Allen Wong

Art Unit

2713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☐ received in Application No. (Series Code / Serial Number) ____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,7.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

Drawings

The drawings are objected to because in fig.3, element 307 should be "Variable length coding means" and in fig.4, element 407 should be "Variable length coding means". Correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-6, 9 rejected under 35 U.S.C. 102(e) as being anticipated by Yamaguchi (5,737,022).

Regarding claim 5, discloses a decoding apparatus of moving image signal comprising:

variable length code decoding means (fig.9A, element 102) for decoding at least two or more motion vectors relating to the present processing pixel block;

motion compensation means (fig.7, elements 113, 141 and 144) for compensating the motion of coded frame corresponding to each one of said two or more motion vectors, and generating two or more predicted images relating to the present processing pixel block;

bit error detecting means (fig.7, element 100 is the error detection means, in fig. 9A, element 102 determines if an error exists and if an error does exist, then the information is supplied to element 103 for flagging the error) for detecting a bit error from the output of said variable length code decoding means;

memory means (fig.7, element 120) for storing the bit error detecting result of said bit error detecting means; and

predicted image selecting means (fig.7, element 150; a selector does recognize whether decoding error exists and then selects the predicted image to be used in reconstructing the present processing pixel block) for recognizing presence or absence of decoding error contained in said two or more predicted images, and selecting the predicted image to be used in reconstruction of the present processing pixel block.

Note claims 1, 2 and 6 have similar corresponding elements.

Regarding claim 9, discloses a coding apparatus comprising:

motion vector detecting means (fig.24, element 710) for detecting at least two or more motion vectors relating to the present processing pixel block;

motion compensation means (fig.24, element 730) for issuing plural predicted images from the output of said motion vector detecting means; and

intra/inter judging means (fig.24, elements 740 and 750 form an intra/inter judging means for determining whether the present processing pixel block when the correlation of two or more predicted images compensated of motion by said two or more motion vectors as the output of said motion compensation means is high or low) for inter-coding the present processing pixel block when the correlation of two or more

predicted images compensated of motion by said two or more motion vectors as the output of said motion compensation means is high, and intra-coding the present processing pixel block when the correlation of said two or more predicted images is low.

Note claims 3 and 4 have similar corresponding elements.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaguchi (5,737,022).

As for claims 7 and 8, although Yamaguchi does not specifically disclose the memory (fig.7, element 120) used to store bit errors of each frame into a map format, it would have been obvious to one of ordinary skill in the art to divide any memory into any number of divisible parts so important video information could be organized and stored properly.

Regarding claims 10 and 11, Yamaguchi discloses an adder (fig.7, element 770) which is equivalent to a predicted image combining means since images are being added. Also, Yamaguchi discloses a subtracter (fig.7, element 760) which functions as a prediction error calculating means for obtaining a prediction error. Although Yamaguchi does not specifically use the term "variance" when the intra/inter judging means compare the predictive error data and the present processing pixel block, it is well

known that the term "difference" is equivalent to the term "variance" and that the intra/inter judging means does compare the differences between the present processing pixel block and the prediction error from the output of the prediction error calculating means to decide on the next course of action (see fig.24).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 9-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

AW
July 13, 2000

ANDY RAO
PRIMARY EXAMINER